



US Environmental Protection Agency Office of Pesticide Programs

**Office of Pesticide Programs
Microbiology Laboratory
Environmental Science Center, Ft. Meade, MD**

Standard Operating Procedure for Handling Spills of Biohazardous Material

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EPA/OPP MICROBIOLOGY LABORATORY
ESC, Ft. Meade, MD

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for
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SOP Number: MB-13-01

Date Revised: 11-09-07

Initiated By: _____ Date: ____/____/____

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1.0 SCOPE AND APPLICATION:

- 1.1 The protocol presents guidelines for decontamination and clean up of biohazardous spills. Periodically, the SOP distinguishes between large spills vs. small spills, and spills inside vs. outside of the biological safety cabinet. Procedures for responding to a spill may vary, depending upon the degree and location of the spill of biohazardous material.

2.0 DEFINITIONS:

- 2.1 *Mycobacterium bovis* (BCG) is a live attenuated vaccine strain used to vaccinate humans against infection by *Mycobacterium tuberculosis*.
- 2.2 BSC = biological safety cabinet
- 2.3 PPE = personal protective equipment
- 2.4 CDC = Centers for Disease Control and Prevention
- 2.5 NIH = National Institutes of Health
- 2.6 “Appropriate” disinfectant = EPA-registered hospital disinfectant (efficacious against *S. aureus*, *P. aeruginosa*, and *S. choleraesuis*) or hospital disinfectant with tuberculocidal claims (efficacious against *S. aureus*, *P. aeruginosa*, *S. choleraesuis*, and *M. bovis* (BCG)). All disinfectants must be used according to the directions (e.g., use dilution, contact time, etc.) specified on the labeling.
- 2.7 Spill = A spill is defined as a *biohazardous material out of control*. The quantity of the biohazardous material spilled is not the sole determining factor in deciding whether or not an event is classified as a spill. Rather, the essential issue is whether the biological agent, the location, and the quantity collectively cause the situation to be beyond the control of the laboratory worker. A large spill is one that cannot be handled safely by laboratory employees in the immediate area. A small spill is one which can be handled by the laboratory worker in the immediate area without posing a serious threat to their health and safety.
- 2.8 OEP = Occupant Emergency Plan
- 2.9 CHP = Chemical Hygiene Plan
- 2.10 Restrooms = Restrooms equipped with showers (e.g., D222 and D223)

- 2.11 References to water mean reagent-grade water
- 2.12 P100 HEPA = Oil proof High-Efficiency Particulate Air filter, 99.97% efficient in removing particles 0.3 microns or larger

3.0 HEALTH AND SAFETY:

- 3.1 To protect the laboratory worker from possible infection by microorganisms, the health and safety guidelines provided in SOP MB-01 (Biosafety in the Laboratory) and in the Centers for Disease Control and Prevention/National Institutes of Health (CDC/NIH) "Biosafety in Microbiological and Biomedical Laboratories," (BMBL) 5th ed. (see ref. 15.1) manual must be followed. All laboratory personnel are required to read and familiarize themselves with SOP MB-01 and sections on Biosafety Levels 2 and 3 in the BMBL.
- 3.2 Spills and accidents are handled according to the practices outlined in this SOP, as well as procedures referenced in the ESC OEP and CHP. See section 10.1 for instructions for reporting spills to the Branch Chief and SHEM (Safety, Health, and Environmental Management) manager.
- 3.3 Procedures for handling spills of biosafety level 3 microorganisms, including *Bacillus anthracis*, are divided into two categories: 1) spills occurring inside of the BSC, and 2) spills occurring outside of the BSC. Serious or lethal disease may result from inhalation of a biosafety level 3 microorganism. If the BSC remains operational following a spill, infectious aerosols resulting from a spill inside of the BSC are contained, and the analysts do not need to evacuate the laboratory to avoid exposure. Infectious aerosols resulting from spills outside of the BSC are not contained; hence the need for different responses, depending upon the location of the spill. In the event of a spill of a biosafety level 3 microorganism (excluding *Bacillus anthracis*), workers are to evacuate the laboratory. In the event of a spill of *B. anthracis*-contaminated material outside of the BSC, workers (protected by respirators) are to remain in the laboratory. Immediately contact the SHEM manager and the Branch Chief or Senior Science Advisor by telephone from the laboratory.
- 3.4 In the event that analysts are unable to reach the SHEM manager, they are to call security at extension 2800 and report the spill. Security will locate the SHEM manager or his designee.

4.0 CAUTIONS:

- 4.1 Lack of use or understanding of this SOP may negatively impact the decontamination efforts of laboratory staff and hence, cause unnecessary exposure of employees to biohazardous microorganisms.
- 4.2 Room-specific procedures (see Table 3) for addressing clothing and skin contaminated with a biosafety level 3 microorganism result from the difference in the structure of the double-door access rooms in B202 and B207. The B202 double-door access room has a sink. The B207 double-door access room does not have a sink.
- 4.3 Failure to clean the ultraviolet lamps in the BSCs will reduce the lamps' effectiveness. Periodically clean the ultraviolet lamps in the BSCs with a lint-free cloth dampened with alcohol.
- 4.4 Do not use a bleach solution to decontaminate stainless steel surfaces (e.g., BSC) following a spill of biohazardous material, including spore-forming bacteria (e.g., *Bacillus subtilis*), unless the microorganism is a select agent (i.e., *Bacillus anthracis*). In the event that a spill occurs in the BSC involving *Bacillus anthracis*, treat the stainless steel surfaces with a bleach solution as described in Table 4.

5.0 INTERFERENCES:

- 5.1 Failure to become familiar with and to put into practice the procedures set forth in this SOP will result in analysts who are a danger to themselves, others, and the environment.
- 5.2 Improper maintenance and/or expired certification may result in failure of the BSCs to operate properly. Refer to proper use and maintenance procedures in SOP QC-06, Use and Maintenance of Biological Safety Cabinets.

6.0 PERSONNEL QUALIFICATIONS:

- 6.1 Personnel are required to be knowledgeable of the procedures in this SOP. Documentation of training and familiarization with this SOP can be found in the training file for each employee.

7.0 SPECIAL APPARATUS AND MATERIALS:

- 7.1 Autoclave
- 7.2 Biohazard bags (clear in color, autoclavable) or containers inside and outside of the biological safety cabinets for collection and storage of biohazardous waste.
- 7.3 When specified, personal protective equipment (PPE) such as gloves, safety glasses, lab coats, disposable laboratory garments, shoe covers, respiratory protection (respirators with P100 HEPA filter cartridges), and temporary clothing (i.e., scrubs).
- 7.4 Biosafety Spill Kit containing items such as autoclave bag, latex gloves, gloves for handling broken glass, dustpan/brush, shoe covers, disposable lab coat, paper towels, disinfectant (with hospital disinfectant and tuberculocidal efficacy), and safety glasses.
- 7.5 Appropriate signs to identify biohazardous materials and to limit access to laboratories.
- 7.6 Bleach solutions made fresh as needed. Discard solution at the end of the day. When a new container of bleach is opened, the analyst will note the date opened on the container. The container of bleach will be discarded six months from the date of receipt.
 - 7.6.1 1:10 diluted bleach solution for decontamination purposes (vegetative cells). Using an EPA-registered sodium hypochlorite product, dilute as follows: 1 part bleach, 9 parts water.
 - 7.6.2 1:10 diluted bleach solution **at neutral pH** for decontamination purposes (spore-forming microorganisms). Using an EPA-registered sodium hypochlorite product, dilute as follows: 1 part bleach, 8.4 parts water, and 0.6 parts 5% white vinegar or 5% lab grade acetic acid.
- 7.7 Appropriate disinfectants for microorganisms specified in Attachment A of SOP MB-01, Biosafety in the Laboratory.
 - 7.7.1 For microorganisms in vegetative form, use a 1:10 diluted bleach solution as described in section 7.6.1, Lysol IC Brand Disinfectant Cleaner (EPA Reg. No. 675-43) at a 1:200 dilution (5 mL

disinfectant + 995 mL water), or other EPA- registered hospital disinfectant/tuberculocide.

7.7.2 For spore-forming microorganisms, prepare the adjusted bleach solution described in section 7.6.2.

7.8 Key card readers are used to limit access to testing laboratories. Only authorized personnel are permitted to enter.

8.0 INSTRUMENT OR METHOD CALIBRATION: Not applicable

9.0 SAMPLE HANDLING AND STORAGE: Not applicable

10.0 PROCEDURE AND ANALYSIS:

10.1 **Guidance for Spills of Biohazardous Material - Reporting Instructions**

10.1.1 Accidents are handled according to the practices outlined in this subpart, as well as procedures referenced in the OEP and the ESC CHP.

10.1.2 *All spills and accidents* involving a Biosafety Level 2 or 3 microorganism, regardless of how minor a spill, are reported to the Branch Chief and the SHEM manager (or call security desk at extension 2800).

10.1.3 The Branch Chief is responsible for documenting spills and accidents.

10.1.4 The Branch Chief and SHEM manager will determine if written documentation or follow-up is warranted.

10.2 **Recommendations for Reducing Potential for Spills of Biohazardous Material**

10.2.1 Use secondary containment (e.g., autoclave bin) when transporting live cultures in liquid media or on solid media.

10.2.2 Use secondary containment to store biohazardous waste (plates and tubes) that is generated during the course of an assay.

10.2.3 Prepare the least amount of culture necessary for an assay.

10.2.4 Maintain a clean, well-organized work environment.

10.3 **Guidance for Spills of Biohazardous Organisms Requiring Biosafety Level 1 and 2 Containment. (see Attachment A) - Spills Outside and Inside the BSC.**
See the summary table (Table 1) below:

Table 1: Biosafety Level 1 and 2 Spill Control Procedures
Spills Outside & Inside of the BSC

Notify Workers/SHEM Manager/Laboratory Director (or Security)	Alert workers in the laboratory that a spill has occurred. Direct (via telephone, note on door, etc.) analysts not present in the laboratory to stay out until spill clean up is complete. Contact the SHEM Manager (or call security desk at extension 2800) and Branch Chief.
Maintain BSC air flow	Keep the BSC operational. <u>Do not turn off the blower for any reason.</u>
Treat Human Injury	Treat injury or call 911, depending upon the severity of the injury.
Control the Source	Stand the spilled bottle upright, and unplug any small contaminated equipment (i.e., vortex, timer).
Control the Spread	Cover the spill with a paper towel (not plastic-backed material) or other appropriate absorbent material (e.g., Isosorb 13000) to prevent the spill area from growing in size.
Remove Contaminated Clothing	Remove contaminated gloves, lab coat, and street clothing and place in an autoclavable container or bag. Wash contaminated skin as described below. Replace contaminated street clothing with temporary clothing such as scrubs (located in B202 and B207), or jumpsuit from the shower area of the restrooms D222 and D223.
Wash Contaminated Skin	For small spills on the skin, wash skin thoroughly with soap and water and don temporary clothing. For large spills to a significant portion of the body and clothing, disrobe, put on temporary clothing and shoe covers (to protect against shedding of infectious microorganisms in the corridor), wash hands with soap and water, exit the laboratory and proceed to the restroom (D222 or D223) to fully shower for 10 minutes. Discard temporary clothing and shoe covers in autoclavable container or bag. Don new set of temporary clothing (e.g., jumpsuit in restroom).
Decontaminate Area	<p>Vegetative cells: Saturate the paper towel or other absorbent material, starting with the edges of the spill and working towards the center, with liquid disinfectant (e.g., 1:10 bleach solution, section 7.6.1; 1:200 Lysol IC Brand Disinfectant Cleaner, section 7.7.1) and let stand for 20 to 30 minutes. Do not use a bleach solution on stainless steel surfaces of the BSC.</p> <p>Sporeforming bacteria: For spills of sporeforming bacteria on non-stainless steel surfaces, use a 1:10 diluted bleach solution at neutral pH (section 7.6.2) for a 60-minute contact time. For spills of sporeforming bacteria in the BSC (stainless steel), wipe or spray surface with a non-bleach liquid disinfectant and wipe up spill with paper towels to physically remove spores. Turn on UV light overnight.</p>
Clean Up	Pick up absorbent material and place in autoclavable container or bag. Use thick gloves, scoop, and brush found in biosafety spill kit to clean up broken glass. Place in autoclavable container.
Inspect the Area	Carefully check the entire affected area and beyond for remaining spill or cleanup residue.
Decontaminate all clean-up material and PPE	Autoclave contaminated paper towel or other absorbent material and any contaminated broken glass and writing utensils according to SOP MB-01, Biosafety in the Laboratory. Treat contaminated gloves (for handling broken glass), scoop, and brush with disinfectant or place under the UV light overnight. Treat contaminated PPE and any contaminated street clothing with disinfectant or autoclave as described in section 10.8. Discard autoclaved broken glass in a broken glass container.

10.4 Guidance for Spills of Biohazardous Organisms Requiring Biosafety Level 3 Containment (excluding *Bacillus anthracis*) - Spills contained within the BSC (bioaerosols will be contained by the BSC's laminar air flow). See the summary table (Table 2) below:

Table 2: Biosafety Level 3 Spill Control Procedures (Excluding <i>Bacillus anthracis</i>) Spills Inside of the BSC	
Notify Workers/SHEM Manager/Laboratory Director	Alert workers in the laboratory that a spill has occurred. Direct (via telephone, note on door, etc.) analysts not present in the laboratory to stay out until spill clean up is complete. Contact the SHEM Manager (or call security desk at extension 2800) and the Branch Chief.
Maintain BSC Air Flow	Keep the BSC operational. <u>Do not turn off the blower for any reason.</u>
Treat Human Injury	Treat injury or call 911, depending upon the severity of the injury.
Control the Source	Stand the spilled bottle upright, and unplug any small contaminated equipment (i.e., vortex, timer).
Control the Spread	Cover the spill with a paper towel (not plastic-backed material) or other appropriate absorbent material (e.g., Isosorb 13000) to prevent the spill area from growing in size.
Remove Contaminated Clothing	Remove contaminated gloves, lab coat, and street clothing and place in an autoclavable container or bag. Wash contaminated skin as described below. Replace contaminated street clothing with temporary clothing such as scrubs (located in B202 and B207 double-door access rooms).
Wash Contaminated Skin	For small spills on the skin of the hands or forearms, wash skin thoroughly with soap and water.
Decontaminate Area	Saturate the paper towel or other absorbent material, starting with the edges of the spill and working towards the center, with liquid disinfectant (e.g., 1:200 Lysol IC Brand Disinfectant Cleaner, section 7.7.1) and let stand for 20 to 30 minutes. Do not use a bleach solution on stainless steel surfaces of the BSC.
Clean Up	Pick up absorbent material and place in autoclavable container or bag. Use thick gloves, scoop, and brush found in biosafety spill kit to clean up broken glass. Place glass in autoclavable container.
Inspect the Area	Carefully check the entire affected area and beyond for remaining spill or cleanup residue.
Decontaminate all clean-up material and PPE	Autoclave contaminated paper towel or other absorbent material and any contaminated broken glass and writing utensils according to SOP MB-01, Biosafety in the Laboratory. Treat contaminated gloves (for handling broken glass), scoop, and brush with disinfectant or place under the UV light overnight. Treat contaminated PPE and any contaminated street clothing with disinfectant or autoclave as described in section 10.8. Discard autoclaved broken glass in a broken glass container.

10.5 Guidance for Spills of Biohazardous Organisms Requiring Biosafety Level 3 Containment (excluding *Bacillus anthracis*) - Spills *Outside of the BSC* (risk of inhalation exposure). See the summary table (Table 3) below:

Table 3: Biosafety Level 3 Spill Control Procedures (Excluding <i>Bacillus anthracis</i>) <i>Spills Outside of the BSC</i>	
Notify Workers/SHEM Manager/Laboratory Director (or Security)	Alert workers in the laboratory that a spill has occurred. Contact SHEM Manager (or call security desk at extension 2800) and Branch Chief.
Maintain BSC Air Flow	Keep the BSC operational. <u>Do not turn off the blower for any reason.</u>
Evacuate Laboratory	Remove lab coat and gloves, discarding them in the biohazard bin. Exit the laboratory to the double-door access room.
Treat Human Injury	Treat injury or call 911, depending upon the severity of the injury.
Remove Contaminated Clothing	Once in the double-door access room, remove contaminated street clothing and place in an autoclavable container or bag. Wash contaminated skin as described below. Replace contaminated street clothing with temporary clothing such as scrubs (located in B202 and B207 double-door access rooms). Wash hands in the sink in the double-door access room (B202) or if the spill occurred in B207, exit the double-door access room and proceed to another laboratory to wash hands.
Wash Contaminated Skin	For small spills on the skin in B202, wash skin thoroughly with soap and water and don temporary clothing. For small spills on the skin in B207, put on a disposable lab coat/tyvek sleeve and gloves (to protect against shedding of infectious microorganisms in the corridor) and proceed to another laboratory to wash skin thoroughly with soap and water. For large spills (in either laboratory) to a significant portion of the body and clothing, disrobe in the double-door access room, put on temporary clothing, gloves, and shoe covers, exit the laboratory and proceed to the restroom (D222 or D223) to fully shower for 10 minutes. Discard temporary clothing, gloves, and shoe covers in an autoclavable container or bag. Don new set of temporary clothing (e.g., jumpsuit in restroom).
Direct Workers to Stay Out	Direct (via telephone, note on door, etc.) analysts not present in the laboratory to stay out until spill clean up is complete.
Allow Facility's Ventilation to Remove Aerosols	Wait at least 30 minutes before re-entering the laboratory to allow the ESC's exhaust air ventilation system to remove bioaerosols.
Re-Enter the Laboratory	Don disposable lab coat, gloves, safety glasses, shoe covers, and respirator with P100 HEPA filter cartridges. Re-enter the laboratory. Survey the spill site for location and amount of spill.
Cover the Spill Area	Cover the spill with a paper towel (not plastic-backed material) or other appropriate absorbent material (e.g., Isosorb 13000). Unplug any small contaminated equipment (i.e., vortex, timer).

Decontaminate Area	Saturate the paper towel or other absorbent material, starting with the edges of the spill and working towards the center, with liquid disinfectant (e.g., 1:10 bleach solution, section 7.6.1; 1:200 Lysol IC Brand Disinfectant Cleaner, section 7.7.1) and let stand for 20 to 30 minutes. Do not use bleach solution on stainless steel surfaces.
Clean Up	Pick up absorbent material and place in autoclavable container or bag. Use thick gloves, scoop, and brush found in biosafety spill kit to clean up broken glass. Place glass in autoclavable container.
Inspect the Area	Carefully check the entire affected area and beyond for remaining spill or cleanup residue.
Decontaminate all clean-up material and PPE	Autoclave contaminated paper towel or other absorbent material and any contaminated broken glass and writing utensils according to SOP MB-01, Biosafety in the Laboratory. Treat contaminated gloves (for handling broken glass), scoop, and brush with disinfectant or place under the UV light overnight. Treat contaminated PPE and any contaminated street clothing with disinfectant or autoclave as described in section 10.8. Discard autoclaved broken glass in a broken glass container.

10.6 Guidance for Spills of Materials with Potential Risk of Exposure to *Bacillus anthracis* - Spills contained within the BSC (bioaerosols will be contained by the BSC's laminar air flow). See the summary table (Table 4) below:

Table 4: Spill Control Procedures for <i>Bacillus anthracis</i> Spills Inside of the BSC	
Notify Workers	Alert workers in the laboratory that a spill has occurred in the BSC. Notify the SHEM Manager and Branch Chief.
Maintain BSC Air Flow	Keep the BSC operational. <u>Do not turn off the blower for any reason.</u>
Keep Hands Inside the BSC	Analyst must keep his or her hands inside of the BSC until the spill is cleaned up and the outer layer of nitrile gloves has been removed. Other analysts (uncontaminated) in the laboratory will assist by supplying the necessary cleanup materials.
Spill onto Absorbent Padding	If the spill occurred onto absorbent padding, return the overturned flask, tube, etc., to an upright position. Place the contaminated absorbent padding and other items into the autoclavable waste container in the BSC. Wipe down the BSC with 70% ethanol or 1:200 Lysol IC Brand Disinfectant (section 7.7.1), replace the absorbent padding and resume work. Upon completion of work in the BSC, turn on the UV light for a minimum of 15 hours to decontaminate the area of the spill.
Spill directly on BSC Surface (no absorbent padding)	If the spill occurred on the surface of the BSC, proceed through the steps below.
Control the Spread	Return overturned flask, tube, etc. to an upright position. Cover the spill with paper towels (not plastic-backed paper) or other absorbent material to prevent the spill area from growing in size. Unplug any small contaminated equipment (i.e., vortex, timer).
Pre-clean/Physical Removal of Spores	Saturate paper towel or other absorbent material, starting with the edges and moving towards the center, with a 1:10 diluted bleach solution at neutral pH (section 7.6.2). Let stand for ten minutes.

Clean Up	Use thick gloves, scoop, and brush found in biosafety spill kit to clean up broken glass. Place glass in autoclavable container inside the BSC. Wipe up liquid with paper towels. Flush the BSC with water, 70% ethanol, or 1:200 Lysol IC Brand Disinfectant (section 7.7.1) to remove excess sodium hypochlorite. Wipe up the liquid with paper towels. Place all absorbent material/paper towels in the autoclave bin inside the BSC.
Inspect the Area	Carefully check the entire affected area and beyond for remaining spill or cleanup residue.
Turn on UV Light in BSC	Once the spill has been pre-cleaned and the liquid wiped up, turn on the UV light for a minimum of 15 hours.
Decontaminate all clean-up material and PPE	Autoclave biohazardous waste, including gloves/brush/scoop used to pick up broken glass, using a 3 hour liquid kill cycle for liquid and/or solid waste at 121°C. Discard autoclaved broken glass in a broken glass container.

10.7 ***Guidance for Spills of Materials with Potential Risk of Exposure to *Bacillus anthracis* - Spills outside of the BSC (risk of inhalation exposure).*** See the summary table (Table 5) and text in sections 10.7.1 through 10.7.6 below:

Table 5: Spill Control Procedures for <i>Bacillus anthracis</i> Spills Outside of the BSC	
Notify Workers	Alert workers in the laboratory that a spill has occurred.
Remain in Laboratory/Contact SHEM Manager and Lab Director	<u>Do not exit laboratory.</u> Contact SHEM Manager (or call security desk at extension 2800) and Branch Chief by telephone from the laboratory.
Do Not Remove PPE	Do not remove any of your PPE, especially the respirator.
Notify Workers Outside of the Laboratory	Use the telephone or place a note (readable from the corridor) on the glass section of the laboratory door to warn workers from entering the laboratory.
Remain Calm and Wait for Assistance	The SHEM Manager, Branch Chief, or their designees will contact the Ft. Meade Hazardous Materials Team for assistance if necessary.

- 10.7.1 Once the door to the B-wing laboratories wing has been secured to prevent anyone from entering the area, the facility may be evacuated. Other people present in the B-wing second floor, but not directly in the laboratory where the spill occurred, may evacuate the building in the direction of the assembly area (OPP parking lot).
- 10.7.2 Once on the scene, the FGGM Haz-Mat team may set up a decontamination tent in the parking lot outside the entrance to the

B-wing laboratories. Communication with the laboratory staff will occur via the laboratory telephone.

- 10.7.3 Once the external decontamination tent is prepared, the FGGM Haz-Mat team and the SHEM manager may enter the building (wearing at least a Level B PPE ensemble) with the materials needed to conduct a first level decontamination of the laboratory staff and proceed to the laboratory spill site.
- 10.7.4 Once in the affected laboratory, the entry team may assemble a decon pool under the emergency shower and allow the laboratory staff to remove their PPE (not their respirator) and clothing, then wash briefly with soap and water prior to redressing in a tyvek suit. **Under no circumstances is the respirator to be removed while still in the building!**
- 10.7.5 After the initial decontamination, the laboratory staff may be escorted out of the facility by the Haz-Mat team to the decontamination tent for a second full body decontamination prior to being taken to the Fort Meade Paramedics for treatment and transport to the hospital for observation.
- 10.7.6 The FGGM Haz-Mat team may then assist the SHEM manager in determining the extent of the biological contamination, environmental sampling, conducting remediation if possible and/or sealing the second floor of B-wing off from the rest of the facility.

10.8 Decontamination of Cloth Lab Coats, Street Clothing, and Footwear.

- 10.8.1 Decontaminate clothing with an appropriate disinfectant or by autoclaving.
 - 10.8.1.1 If using disinfection as a means of decontamination, treat area of contamination and surrounding area with disinfectant for label-specified dilution and contact time (section 7.7.1).
 - 10.8.1.2 Clothing potentially contaminated with microorganisms in spore form must be autoclaved according to MB-01.
 - 10.8.1.3 It is less harmful to clothing to autoclave it in a tray than it is to bag it. Do not put water in the tray with the lab coat.

Rather, put a second tray into the autoclave and add water to this tray.

- 10.8.2 After clothing is decontaminated (by disinfection or autoclaving), immerse it in water containing detergent to aid physical removal of decontaminated biohazardous material.
- 10.8.3 Rinse lab coat and set aside to be sent out with the weekly lab coat laundry service.
- 10.8.4 Take street clothing and footwear home and launder.

11.0 DATA ANALYSIS/CALCULATIONS: None

12.0 DATA MANAGEMENT/RECORDS MANAGEMENT:

- 12.1 The Branch Chief is responsible for documenting spills and accidents.

13.0 QUALITY CONTROL:

- 13.1 Appropriate quality control measures are integrated into each SOP.

14.0 NONCONFORMANCE AND CORRECTIVE ACTION:

- 14.1 Strict adherence to the biosafety practices is required. Nonconformance will result in notification, retraining, or disciplinary action of laboratory employees.

15.0 REFERENCES:

- 15.1 Chasewood, L.C. and Wilson, D.E. eds. 2007. Biosafety in Microbiological and Biomedical Laboratories. U.S. Department of Health and Human Services. U.S. Government Printing Office, Washington, D.C.

- 15.2 Biosafety, 42 CFR Part 73.12.

16.0 FORMS AND DATA SHEETS: None